



## EXECUTIVE COMPUTING

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# Does your small computer system need upgrading?

**L**IKE MANY SMALL-computer owners, you may have originally purchased your machine to handle one job — accounting, for instance, or word processing. But after this application was up and running successfully, you probably began to see other ways to put your computer to good use.

Then, as you added more and more applications, you may have noticed that performance began to deteriorate. Response time may have slowed and overall productivity began to drop. Sound familiar? These are warning signals that your small computer system may need upgrading.

All too often, small-computer users don't think about upgrading until a crisis has developed. In order to keep this from happening, here are some "crisis symptoms":

- ✓ You unexpectedly run out of available memory or space on your hard disk, causing your operations to come to a halt while programs are moved out of memory or large files are moved onto floppy disks.
- ✓ A program that worked fine with small files suddenly begins to take hours instead of minutes to do the same tasks with larger files.
- ✓ Your staff must work overtime constantly to keep up with the workload, or you have to schedule a second shift to get everything done on the computer.

### Sometimes solutions are simple

Although these "crisis symptoms" may sound serious, as a first step you should figure out whether a shortage of computer capability actually exists. Large computer installations do this by keeping a written record of all important jobs and how long they take to run on the computer. In conjunction with this, a record is needed of exactly which programs and data files need to be loaded on the computer for running those jobs.

Surprisingly, it is often the case that "off loading" unused programs and data files from your computer's memory and hard disk accomplishes the needed speedup of processing.

One simple way to keep tabs on computer

performance is with a daily use log. The log should show what jobs are run on the computer, when each started and ended, and how much was accomplished (how many invoices were processed, for example). Mainframe computer installations use such a log every day, on an ongoing basis. For a small business computer, however, it is probably adequate to use a log less frequently — say, for a single weekly period every three months — in order to keep tabs on its regular usage.

By comparing your recent log with the one three months ago and six months ago, you can readily begin to see any potential trouble. You will find it easier to project future needs based on this documented historical perspective. Peak loads, seasonal patterns and trends should stand out clearly.

### **Operating tips**

To help you get the most from your present small computer system, it's wise to stay attuned to any bottleneck that keeps your system from running at full capacity. A system is only as powerful as its weakest link, and one way to postpone the need to buy a new computer is to keep your equipment at peak efficiency.

Understandably, the philosophy of "stick with your old machine as long as possible" is unpopular with many computer vendors. They want you to think that their latest model is the only way to fly. But the introduction of a faster, shinier computer is no reason to throw away your old one if it still is capable of doing the job. In my opinion, there's no disgrace in using last year's model — and there may be some profit in it if you can avoid the time and hassles of converting to a new system.

Here are some suggestions for dealing with the two most common restraints: **operating bottlenecks** and **equipment bottlenecks**.

✓ Be careful of "creeping reportitis" — the adding of more and more reports, printouts, listings and audit trails until your computer is clogged by paper work. Each new report may have seemed worthwhile and justified at the time it was introduced, but the net cumulative effect may drown your computer in a sea of paper. One way to learn whether a report is really necessary is to stop sending it out. If no one complains, perhaps it can be eliminated.

✓ If you can't reduce the quantity of the work, and occasional overtime isn't enough to help, you may want to transfer it elsewhere. Perhaps one function, such as word processing, merits a stand-alone machine. Or maybe you should turn over your twice-a-month payroll processing to an outside service bureau. Before you decide to proceed with an expensive upgrade of your equipment, determine whether a few such changes could solve the problem for less money.

✓ Some small computers are slowed by a weak link in their equipment chain. Usually it is the printer. One solution, if you have a slow printer, is to buy a faster one. A cheaper way may be to arrange for "print spooling," where the computer simply writes the data to a file or a buffer and then goes on to do other work. Since many programs offer print-spooling options built in, a simple procedural change may accomplish the speedup with almost no out-of-pocket cost.

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